



City of Burlington Steve Roy Project Engineer August 5, 2013

Steve,

Per your request, Evergreen Roofing began to gather information regarding the roof on the Memorial Auditorium.

Tests cuts were taken in 4 locations in order to ascertain the components and condition of the existing Ballasted EPDM Roofing System. The core samples showed the roof to be 7" thick and made up of the following materials beginning from the structural deck.

- 1. Wood plank decking.
- 2. 1" perlite insulation.
- 3. 5" of expanded poly-styrene insulation.
- 4. 1" of Isocyanurate insulation.
- 5. Ballasted .045 EPDM membrane.

This roof assembly represents an older design that has an extremely poor fire rating and relatively low 'R' value considering the system thickness,

The main components in the assembly are the Perlite and EPS insulation. Both of these materials are very flammable and are cause for concern since the structural wood deck is also flammable.

Evergreen proposes that the entire roof assembly be removed down to the wood deck. We would recommend the use of Isocyanurate Insulation of the same thickness as the original roof system.

Isocyanurate Insulation has nearly double the 'R' value of the EPS and is a class A fire rated product. Seven inches of Isocyanurate Insulation would provide the 'R' value of approximately 47. This substantial increase will aid in lowering the expense of both the heating and cooling of the facility.

The membrane system installed over the new insulation will not require stone ballast, making the roof much easier to maintain while providing a substantial increase in the life expectancy of the entire roof assembly.

Attached you will find what we feel is an appropriate BUDGET number for your project.

Please feel free to call me with any questions or concerns you may have.

Sincerely,

Paul Gurney Sales/Superintendent